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**United States Patent** [19]**Cincotta et al.**[11] **Patent Number:** **5,468,755**[45] **Date of Patent:** **Nov. 21, 1995**[54] **THERAPEUTIC PROCESS FOR THE  
TREATMENT OF THE PATHOLOGIES OF  
TYPE II DIABETES**[75] Inventors: **Anthony H. Cincotta**, Andover, Mass.;  
**Albert H. Meier**, Baton Rouge, La.[73] Assignee: **The Board of Supervisors of  
Louisiana State University and  
Agricultural and Mechanical College**,  
Baton Rouge, La.[21] Appl. No.: **158,153**[22] Filed: **Nov. 24, 1993****Related U.S. Application Data**

[63] Continuation of Ser. No. 813,135, Dec. 23, 1991, abandoned, which is a continuation-in-part of Ser. No. 463,327, Jan. 10, 1990, abandoned, which is a continuation-in-part of Ser. No. 192,332, May 10, 1988, abandoned.

[51] Int. Cl.<sup>6</sup> ..... **A61K 31/44**[52] U.S. Cl. .... **514/288; 514/866**[58] Field of Search ..... **514/288, 866**[56] **References Cited****U.S. PATENT DOCUMENTS**

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*Primary Examiner*—Marianne M. Cintins*Assistant Examiner*—K. Weddington*Attorney, Agent, or Firm*—Darby & Darby[57] **ABSTRACT**

A process for the long term modification and regulation of lipid and carbohydrate metabolism—generally to reduce obesity, insulin resistance, and hyperinsulinemia or hyperglycemia, or both (these are the hallmarks of noninsulin dependent, or Type II diabetes)—by administration (i.e., by oral, sublingual or parenteral administration) to a vertebrate, animal or human, of a dopamine agonist, e.g., bromocriptine. Administration of the bromocriptine is made over a limited period at a time of day dependent on the normal circadian rhythm of insulin resistant and insulin sensitive members of a similar species. Insulin resistance, and hyperinsulinemia and hyperglycemia, or both, can be controlled in humans on a long term basis by such treatment inasmuch as the short term daily administration resets hormonal timing in the neural centers of the brain to produce long term effects.

**39 Claims, No Drawings**